

## **Abstract**

The invention relates to a method for determining the mass of a motor vehicle while taking different driving situations into consideration, involving an evaluation of the respective vehicle acceleration, wherein apart from the driving force of a vehicle drive unit the respective resistance forces resulting from rotational forces, from the air resistance, from the rolling resistance and the slope descending force, are taken into consideration and wherein in the same approach additionally the respective braking force is taken into consideration so that a multitude of different driving situations is evaluated, wherein the individual results are stored and combined suitably into a collective mass value. Hereby different driving situations can be weighted differently. When taking the slope descending force into consideration preferably the respective roadway inclination is determined by determining, by means of a longitudinal acceleration sensor that is installed in the vehicle, the acceleration occurring in the horizontal direction and relating it to the acceleration occurring in the roadway direction. The braking force is preferably determined from the respective braking pressure while taking an estimated coefficient of friction between the brake lining and brake disc or the like into consideration, possibly also from a comparison with the path traveled during the braking operation.